

Akram Abou Assaf

Electrical Engineer

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(949) 685- 8857 • California, Los Angeles

Versatile, self-motivated, and efficient Electrical Engineer with one-year experience in electrical and electronics design, installations, and renewable energy. A driven engineering professional with an aptitude for innovation and creative problem solving. Adept in Microsoft Office Suites and various engineering software and tools. Knowledgeable in electronics design, energy studies, electrical equipment and maintenance, engineering electric and principles, and safety protocols within the engineering industry. Communicative and personable, able to work in teams, learn new software and techniques, and adapt to new environments easily and quickly with professionalism.

Education

Master of Science, Electrical Engineering (Concentration: Sustainable & Power), 2022 till present

California State University of Los Angeles (CSULA) • California, US

Bachelor of Science, Electrical and Electronics Engineering, 2022

Lebanese International University (LIU) • Beirut, LB

Experience

California State University, Los Angeles

Los Angeles, US • 2023 till present

Master's Thesis Researcher

- Conducting research on battery optimization methods in microgrid systems using Stochastic Dual Dynamic Programming (SDDP) algorithm.
- Developing a model to optimize battery operations by minimizing electricity cost and reducing carbon emissions.
- Analysing the performance of the proposed method through simulations and compared it with other existing methods.

California State University, Los Angeles

Los Angeles, US • 2022 till present

Senior Design Student Assistant

- Designed and manufactured a versatile PCB DC-DC converter with multiple outputs for improved functionality. Contributed to several other high-profile projects such as Satellite, RoboSub, and Wire Arc Additive Manufacturing System.
- Demonstrated excellent leadership skills by leading group discussions, tutorials, and laboratory sections under the guidance of the teacher. Actively participated in various workshops, trainings, and conferences to develop and enhance educational skills for optimal student outcomes.

Lebanese International University

Beirut, LBN • 2022

Research Engineer

- Conducted an in-depth cost analysis of diesel and solar pumping systems, leveraging previous training and experience, resulting in a significant 65% reduction in the solar pumping project budget. This involved scrutinizing installation processes and identifying innovative cost-saving measures that were instrumental in reducing overall costs.
- Developed extensive expertise in a diverse range of complex systems, including solar power systems, MV/LV systems, renewable and power systems, hydroelectric power, and irrigation systems. These skills were developed through rigorous training, practical experience, and an insatiable appetite for learning about new and emerging technologies in the field.

HEATCO, Metas

Beirut, LBN • 2021

Site Engineer

- Managed daily assignments including, but not limited to, supervising, and monitoring the site labor force, regulating solar and power system installations, and overseeing quality control and health and safety matters.
- Corresponded with clients and project personnel and ensured that all materials used, and work performed are in accordance with the specifications.

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Areas of Expertise & Software Proficiencies

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|---------------------------|-----------------|---------------------------------|----------------------------------|
| ▪ Microsoft Office Suites | ▪ MATLAB | ▪ Technical& Electrical Design | ▪ Time Management |
| ▪ LTspice | ▪ PSCAD | ▪ Team Building/Mentorship | ▪ Interpersonal Skills |
| ▪ AutoCAD | ▪ PCB Eagle | ▪ Vendor & Client Relationships | ▪ Multitasking/Prioritization |
| ▪ Visual C++ | ▪ KiCad | ▪ Problem Solving | ▪ Verbal/Nonverbal Communication |
| ▪ Proteus 8 Professional | ▪ NetBeans/Java | ▪ Electric Installation | ▪ Electric Vehicles and Machines |

Languages

English: Fluent, **Arabic:** Fluent, **French:** Intermediate